

Inventory of water objects for purposes of development objectives and design of natural frame of Kazan (Russia)

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. The article is devoted to the results of the inventory and certification of water objects in the city of Kazan in 2007-2017. Inventory of water objects contributes to the formation of the natural framework of the city, improvement of the quality of the environment, preservation of the local gene pool of flora and fauna in urban conditions. During the research, 236 small lakes, rivers and their tributaries, as well as wetlands, were identified. The environmental passports were developed for each of them. Registries of water bodies were developed for administrative regions. The inventory and certification of water objects are an effective measure in the conservation of lakes and rivers in urban conditions.

<http://dx.doi.org/10.1088/1755-1315/107/1/012131>

References

- [1] Servos M R, Munkittrick K R, Constantin G, Mngodo R, Aladin N, Choowaew S, Hap N, Kidd K A, Odada E, Parra O, Phillips G, Ryanzhin S and Urrutia R 2013 Science and management of transboundary lakes: Lessons learned from the global environment facility program *Environmental Development* 7 17-31
- [2] Gelashvili D B, Okhapkin A G, Doronina A I, Kolkutin V I and Ivanova E F 2005 Ecological condition of water bodies in Nizhny Novgorod (N. Novgorod: UNN) 270
- [3] Mingazova N M and Derevenskaya O Yu 2000 The concept and methodology of the restoration of small lakes *Hydrobiological Journal* 36 30-42
- [4] Sorokin I N and Petrova R S (ed) 1976 Lakes of the Middle Volga Region (Leningrad: Nauka) 236
- [5] Gelashvili D B, Zinchenko T D and Rozenberg G M 2007 Certification of urban water bodies (methodical recommendations) *Exchange of intellectual property* 6 17-21
- [6] Rozenberg G S, Gelashvili D B, Zinchenko T D and Pereshibaylov L A 2001 On the environmental passportization of urban water objects *J. News of the Samara Scientific Center of the Russian Academy of Sciences* 3 254-264
- [7] Mingazova N M (ed) 2015 Water objects of the Kazan city. Register of water objects of Novo-Savinovsky district (Kazan: Foliant) 116
- [8] 2001 The Red Data Book of the Russian Federation (animals) RAS (Moscow: Astrel) 862
- [9] Derevenskaya O Y, Mingazova N M and Pavlova L R 2015 Lake water quality of Kazan city (Russia) Kaban lake in the anthropogenic pollution conditions and improving actions implementation *International Journal of Applied Engineering Research* 10 44682-44687
- [10] Ansari AA, Gill S S, Lanza G R and Rast W 2011 Eutrophication: Causes, consequences and control XIII (Publisher: Springer) 394